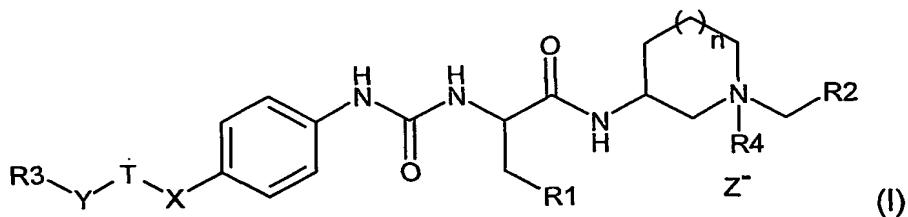


What is claimed is:

1. A compound of formula I as indicated below:



5 wherein

n is 0 or 1;

When X is nitrogen or oxygen, Y is nothing;

When Y is nitrogen or oxygen, X is nothing;

T is a sulfonyl group (SO₂) or carbonyl group (CO) ;

10 When T=CO, X is oxygen or nitrogen;

Z⁻ is selected from the group consisting of halo, CF₃COO⁻, mesylate, tosylate, or any other pharmaceutically acceptable counter ion;

R1 is selected from the group consisting of C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl lower alkyl, C₃-C₈

15 alkenyl, unsubstituted or substituted phenyl, or unsubstituted or substituted phenyl C₁-C₃ lower alkyl; wherein, when substituted, a group is substituted by one or more radicals selected from the group consisting of C₁-C₈ alkoxy, halo, hydroxy, amino, cyano, trifluoromethyl, C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl lower alkyl, phenyl and phenyl C₁-C₃ lower

20 alkyl.

R2 is selected from the group consisting of C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl lower alkyl, unsubstituted or substituted phenyl, or unsubstituted or substituted phenyl C₁-C₃ lower alkyl; wherein, when substituted, a group is substituted by one or more radicals

25 selected from the group consisting of C₁-C₈ alkoxy, halo, hydroxy, amino, cyano, trifluoromethyl, C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl and C₃-C₈ cycloalkyl lower alkyl and heterocycle rings;

R3 is selected from the group consisting of an unsubstituted or substituted following group: phenyl, phenyl C1-C6 lower alkyl, thiophenyl, thiophenyl C1-C6 lower alkyl, furanyl, furanyl C1-C6 lower alkyl, pyridinyl, pyridinyl C1-C6 lower alkyl, imidazolyl, imidazolyl C1-C6 lower alkyl, naphthyl, 5 naphthyl C1-C6 lower alkyl, quinolinyl, quinolinyl C1-C6 lower alkyl, indolyl, indolyl C1-C6 lower alkyl, benzothiophenyl, benzothiophenyl C1-C6 lower alkyl, benzofuranyl, benzofuranyl C1-C6 lower alkyl, benzoimidazolyl, benzoimidazolyl C1-C6 lower alkyl, C1-C8 branched or unbranched alkyl, C3-C8 cycloalkyl, C3-C8 cycloalkyl C1-C6 lower alkyl, or C3-C8 alkenyl; wherein, 10 when substituted, a group is substituted by one or more radicals selected from the group consisting of C1-C8 alkoxy, phenoxy, phenyl C1-C3 alkoxy, halo, hydroxy, amino, cyano, trifluoromethyl, methylenedioxy, ethylenedioxy, propylenedioxy, butylenedioxy, C1-C8 branched or unbranched alkyl, C3-C8 cycloalkyl, C3-C8 cycloalkyl lower alkyl, phenyl, phenyl C1-C3 lower alkyl, 15 thiophenyl, thiophenyl C1-C3 lower alkyl, furanyl, furanyl C1-C3 lower alkyl, pyridinyl, pyridinyl C1-C3 lower alkyl, naphthyl, naphthyl C1-C3 lower alkyl, quinolinyl, quinolinyl C1-C3 lower alkyl, indolyl, indolyl C1-C3 lower alkyl, benzothiophenyl, benzothiophenyl C1-C3 lower alkyl, benzofuranyl, benzofuranyl C1-C3 lower alkyl, COOH, COR6, COOR6, CONHR6, CON(R6)2, 20 COG, NHR6, N(R6)2, G, OCOR6, OCONHR6, NHCOR6, N(R6)COR6, NHCOOR6 and NHCONHR6;

R4 is selected from the group consisting of C1-C8 branched or unbranched alkyl, C3-C8 cycloalkyl, C3-C8 cycloalkyl lower alkyl.

25

2. A. compound according to claim 1 selected from the group consisting of:

n is 0 or 1;

When X is nitrogen or oxygen, Y is nothing;

30 When Y is nitrogen or oxygen, X is nothing;

T is a sulfonyl group (SO₂) or carbonyl group (CO) ;

When T=CO, X is oxygen or nitrogen;

Z⁻ is selected from the group consisting of halo, CF₃COO⁻, mesylate, tosylate, or any other pharmaceutically acceptable counter ion;

R1 is selected from the group consisting of C₁-C₈ branched or
5 unbranched alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl lower alkyl, C₃-C₈ alkenyl, unsubstituted or substituted phenyl, or unsubstituted or substituted phenyl C₁-C₃ lower alkyl; wherein, when substituted, a group is substituted by one or more radicals selected from the group consisting of C₁-C₈ alkoxy, halo, hydroxy, amino, cyano, trifluoromethyl, C₁-C₈ branched or unbranched alkyl,
10 C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl lower alkyl, phenyl and phenyl C₁-C₃ lower alkyl.

R2 is selected from the group consisting of C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl lower alkyl, unsubstituted or substituted phenyl, or unsubstituted or substituted phenyl C₁-C₃ lower alkyl;
15 wherein, when substituted, a group is substituted by one or more radicals selected from the group consisting of C₁-C₈ alkoxy, halo, hydroxy, amino, cyano, trifluoromethyl, C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl and C₃-C₈ cycloalkyl lower alkyl and heterocycle rings;

R3 is selected from the group consisting of an unsubstituted or
20 substituted following group: phenyl, phenyl C₁-C₆ lower alkyl, thiophenyl, thiophenyl C₁-C₆ lower alkyl, furanyl, furanyl C₁-C₆ lower alkyl, pyridinyl, pyridinyl C₁-C₆ lower alkyl, imidazolyl, imidazolyl C₁-C₆ lower alkyl, naphthyl, naphthyl C₁-C₆ lower alkyl, quinolinyl, quinolinyl C₁-C₆ lower alkyl, indolyl, indolyl C₁-C₆ lower alkyl, benzothiophenyl, benzothiophenyl C₁-C₆ lower alkyl,
25 benzofuranyl, benzofuranyl C₁-C₆ lower alkyl, benzoimidazolyl, benzoimidazolyl C₁-C₆ lower alkyl, C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl C₁-C₆ lower alkyl, or C₃-C₈ alkenyl; wherein, when substituted, a group is substituted by one or more radicals selected from the group consisting of C₁-C₈ alkoxy, phenoxy, phenyl C₁-C₃ alkoxy, halo, hydroxy, amino, cyano, trifluoromethyl, methylenedioxy, ethylenedioxy,
30

propylenedioxy, butylenedioxy, C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl lower alkyl, phenyl, phenyl C₁-C₃ lower alkyl, thiophenyl, thiophenyl C₁-C₃ lower alkyl, furanyl, furanyl C₁-C₃ lower alkyl, pyridinyl, pyridinyl C₁-C₃ lower alkyl, naphthyl, naphthyl C₁-C₃ lower alkyl, 5 quinolinyl, quinolinyl C₁-C₃ lower alkyl, indolyl, indolyl C₁-C₃ lower alkyl, benzothiophenyl, benzothiophenyl C₁-C₃ lower alkyl, benzofuranyl, benzofuranyl C₁-C₃ lower alkyl, COOH, COR₆, COOR₆, CONHR₆, CON(R₆)₂, COG, NHR₆, N(R₆)₂, G, OCOR₆, OCONHR₆, NHCOR₆, N(R₆)COR₆, NHCOOR₆ and NHCONHR₆;

10 R₄ is selected from the group consisting of C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl lower alkyl.

or a pharmaceutically acceptable salt thereof.

15 3. A. compound according to claim 1 selected from the group consisting of:
n is 0 or 1;
When X is nitrogen or oxygen, Y is nothing;
When Y is nitrogen or oxygen, X is nothing;

20 T is a sulfonyl group (SO₂) or carbonyl group (CO) ;
When T=CO, X is oxygen or nitrogen;
Z⁻ is selected from the group consisting of halo, CF₃COO⁻, mesylate, tosylate, or any other pharmaceutically acceptable counter ion;
R₁ is selected from the group consisting of C₁-C₈ branched or

25 unbranched alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl lower alkyl, C₃-C₈ alkenyl, unsubstituted or substituted phenyl, or unsubstituted or substituted phenyl C₁-C₃ lower alkyl; wherein, when substituted, a group is substituted by one or more radicals selected from the group consisting of C₁-C₈ alkoxy, halo, hydroxy, amino, cyano, trifluoromethyl, C₁-C₈ branched or unbranched alkyl,

30 C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl lower alkyl, phenyl and phenyl C₁-C₃ lower alkyl.

R2 is selected from the group consisting of C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl lower alkyl, unsubstituted or substituted phenyl, or unsubstituted or substituted phenyl C₁-C₃ lower alkyl; wherein, when substituted, a group is substituted by one or more radicals selected from the group consisting of C₁-C₈ alkoxy, halo, hydroxy, amino, cyano, trifluoromethyl, C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl and C₃-C₈ cycloalkyl lower alkyl and heterocycle rings;

R3 is selected from the group consisting of an unsubstituted or substituted following group: phenyl, phenyl C₁-C₆ lower alkyl, thiophenyl, thiophenyl C₁-C₆ lower alkyl, furanyl, furanyl C₁-C₆ lower alkyl, pyridinyl, pyridinyl C₁-C₆ lower alkyl, imidazolyl, imidazolyl C₁-C₆ lower alkyl, naphthyl, naphthyl C₁-C₆ lower alkyl, quinolinyl, quinolinyl C₁-C₆ lower alkyl, indolyl, indolyl C₁-C₆ lower alkyl, benzothiophenyl, benzothiophenyl C₁-C₆ lower alkyl, benzofuranyl, benzofuranyl C₁-C₆ lower alkyl, benzoimidazolyl, benzoimidazolyl C₁-C₆ lower alkyl, C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl C₁-C₆ lower alkyl, or C₃-C₈ alkenyl; wherein, when substituted, a group is substituted by one or more radicals selected from the group consisting of C₁-C₈ alkoxy, phenoxy, phenyl C₁-C₃ alkoxy, halo, hydroxy, amino, cyano, trifluoromethyl, methylenedioxy, ethylenedioxy, propylenedioxy, butylenedioxy, C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl lower alkyl, phenyl, phenyl C₁-C₃ lower alkyl, thiophenyl, thiophenyl C₁-C₃ lower alkyl, furanyl, furanyl C₁-C₃ lower alkyl, pyridinyl, pyridinyl C₁-C₃ lower alkyl, naphthyl, naphthyl C₁-C₃ lower alkyl, quinolinyl, quinolinyl C₁-C₃ lower alkyl, indolyl, indolyl C₁-C₃ lower alkyl, benzothiophenyl, benzothiophenyl C₁-C₃ lower alkyl, benzofuranyl, benzofuranyl C₁-C₃ lower alkyl, COOH, COR₆, COOR₆, CONHR₆, CON(R₆)₂, COG, NHR₆, N(R₆)₂, G, OCOR₆, OCONHR₆, NHCOR₆, N(R₆)COR₆, NHCOOR₆ and NHCONHR₆;

R4 is selected from the group consisting of C₁-C₈ branched or unbranched alkyl, C₃-C₈ cycloalkyl, C₃-C₈ cycloalkyl lower alkyl.

4.

or a pharmaceutically acceptable salt thereof.

4. A compound according to claim 1 selected from the group consisting of:

5 *N*-(*(3S)*-1-*{[3,4-bis(methyloxy)phenyl]methyl}*-1-methyl-3-piperidiniumyl)-*N*-*{[(4-*
{[(2,2,2-trifluoroethyl)sulfonyl]oxy}phenyl]amino]carbonyl}-L-tyrosinamide
trifluoroacetate;

10 *N*-(*(3S)*-1-*{[3,4-bis(methyloxy)phenyl]methyl}*-1-methyl-3-piperidiniumyl)-*N*-*{[(4-*
{[(5-methyl-2-thienyl)sulfonyl]oxy}phenyl]amino]carbonyl}-L-tyrosinamide
trifluoroacetate;

15 *N*-(*(3S)*-1-*{[3,4-bis(methyloxy)phenyl]methyl}*-1-methyl-3-piperidiniumyl)-*N*-*{[(4-*
{[(4-methyl-2-thienyl)sulfonyl]oxy}phenyl]amino]carbonyl}-L-tyrosinamide
trifluoroacetate;

20 *N*-(*(3S)*-1-*{[3,4-bis(methyloxy)phenyl]methyl}*-1-methyl-3-piperidiniumyl)-*N*-*{[(4-*
{[(8-quinolinylsulfonyl)oxy]phenyl]amino]carbonyl}-L-tyrosinamide
trifluoroacetate;

25 *N*-(*(3S)*-1-*{[3,4-bis(methyloxy)phenyl]methyl}*-1-methyl-3-piperidiniumyl)-*N*-*{[(4-*
{[(3,4-bis(methyloxy)phenyl)sulfonyl]oxy}phenyl]amino]carbonyl}-L-tyrosinamide
trifluoroacetate;

30 *N*-(*(3S)*-1-*{[3,4-bis(methyloxy)phenyl]methyl}*-1-methyl-3-piperidiniumyl)-*N*-*{[(4-*
{[(4-fluorophenyl)sulfonyl]oxy}phenyl]amino]carbonyl}-L-tyrosinamide
trifluoroacetate;

35 *N*-(*(3S)*-1-*{[3,4-bis(methyloxy)phenyl]methyl}*-1-methyl-3-piperidiniumyl)-*N*-*{[(4-*
{[(phenylsulfonyl)oxy]phenyl]amino]carbonyl}-L-tyrosinamide trifluoroacetate;

40 *N*-(*(3S)*-1-*{[3,4-bis(methyloxy)phenyl]methyl}*-1-methyl-3-piperidiniumyl)-*N*-*{[(4-*
{[(5-bromo-2-thienyl)sulfonyl]oxy}phenyl]amino]carbonyl}-L-tyrosinamide
trifluoroacetate;

45 *N*-(*(3S)*-1-*{[3,4-bis(methyloxy)phenyl]methyl}*-1-methyl-3-piperidiniumyl)-*N*-*{[(4-*
{[(3-thienylsulfonyl)oxy]phenyl]amino]carbonyl}-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-*N*-{[(4-{{(2,5-dimethyl-3-thienyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

5 *N*-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-*N*-{[(4-{{(2,2,2-trifluoroethyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-*N*-{[(4-{{(5-methyl-2-thienyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

10 *N*-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-*N*-{[(4-{{(4-methyl-2-thienyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-*N*-{[(4-{{(5-chloro-2-thienyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide

15 trifluoroacetate;

N-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-*N*-{[(4-[(methylsulfonyl)oxy]phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-*N*-{[(4-[(propylsulfonyl)oxy]phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

20 *N*-{[(4-{{2-(acetylamino)-4-methyl-1,3-thiazol-5-yl}sulfonyl]oxy}phenyl)amino]carbonyl}-*N*-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-*N*-{[(4-{{4-(phenylsulfonyl)-2-thienyl}sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide

25 trifluoroacetate;

N-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-*N*-{[(4-{{(5-chloro-2,1,3-benzoxadiazol-4-yl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-*N*-{[(4-[(2-naphthalenylsulfonyl)oxy]phenyl)amino]carbonyl}-L-tyrosinamide

30 trifluoroacetate;

N-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-*N*-{[(4-{[(2,2,2-trifluoroethyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

5 *N*-(3*S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-{[(4-{[(5-methyl-2-thienyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-{[(4-{[(4-methyl-2-thienyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

10 *N*-{[(4-{[(4-cyanophenyl)sulfonyl]oxy}phenyl)amino]carbonyl}-*N*-(3*S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl]-L-tyrosinamide trifluoroacetate;

15 *N*-(3*S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-{[(4-{[(4-trifluoromethyl)phenyl}sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-{[(4-{[(5-(3-isoxazolyl)-2-thienyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

20 *N*-(3*S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-{[(4-{[(3-fluorophenyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-{[(4-{[(1,3,5-trimethyl-1*H*-pyrazol-4-yl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

25 *N*-(3*S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-{[(4-{[(5-methyl-4-isoxazolyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

30 *N*-{[(4-{[(3,5-dimethyl-4-isoxazolyl)sulfonyl]oxy}phenyl)amino]carbonyl}-*N*-(3*S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl]-L-tyrosinamide trifluoroacetate;

N-{[(4-{[(2,4-dichlorophenyl)sulfonyl]oxy}phenyl)amino]carbonyl}-*N*-(3*S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl]-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-{[(4-{[(4-(trifluoromethyl)oxy)phenyl}sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-[(4-[(1-methyl-1*H*-imidazol-4-yl)sulfonyl]oxy)phenyl]amino]carbonyl]-L-tyrosinamide trifluoroacetate;

5 *N*-[(4-[(cyclohexylcarbonyl)oxy]phenyl]amino)carbonyl]-*N*-(3*S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl]-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-*N*-[(4-[(cyclohexylcarbonyl)oxy]phenyl]amino)carbonyl]-L-tyrosinamide trifluoroacetate;

10 *N*-(3*S*)-1-[(4-chlorophenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-[(4-[(cyclohexylcarbonyl)oxy]phenyl]amino)carbonyl]-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-[(3-chlorophenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-[(4-[(cyclohexylcarbonyl)oxy]phenyl]amino)carbonyl]-L-tyrosinamide trifluoroacetate;

15 *N*-(3*S*)-1-[(3,4-bis(methyloxy)phenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-[(4-[(cyclohexylcarbonyl)oxy]phenyl]amino)carbonyl]-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-[(3-hydroxyphenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-[(4-[(2-methylpropanoyl)oxy]phenyl]amino)carbonyl]-L-tyrosinamide trifluoroacetate;

20 *N*-(3*S*)-1-[(3-chlorophenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-[(4-[(2-methylpropanoyl)oxy]phenyl]amino)carbonyl]-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-[(4-chlorophenyl)methyl]-1-methyl-3-piperidiniumyl]-*N*-[(4-[(2-methylpropanoyl)oxy]phenyl]amino)carbonyl]-L-tyrosinamide trifluoroacetate;

25 *N*-(3*S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl]-*N*-[(4-[(1-methylethyl)amino]sulfonyl]phenyl]amino]carbonyl]-L-tyrosinamide trifluoroacetate;

N-(3*S*)-1-ethyl-1-[(3-hydroxyphenyl)methyl]-3-pyrrolidiniumyl]-*N*-[(4-[(1-methylethyl)amino]sulfonyl]phenyl]amino]carbonyl]-L-tyrosinamide trifluoroacetate;

30 or any other pharmaceutically acceptable salt.

5. A compound according to claim 1 selected from the group consisting of:
N-(*(3S*)-1-{[3,4-bis(methyloxy)phenyl]methyl}-1-methyl-3-piperidiniumyl)-*N*-{[(4-{[(2,5-dimethyl-3-thienyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate

5 *N*-(*(3S*)-1-{[3,4-bis(methyloxy)phenyl]methyl}-1-methyl-3-piperidiniumyl)-*N*-{[(4-{[(2,5-dimethyl-3-thienyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;
N-(*(3S*)-1-{[3,4-bis(methyloxy)phenyl]methyl}-1-methyl-3-piperidiniumyl)-*N*-{[(4-{[(1-methylethyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

10 *N*-(*(3S*)-1-(1,3-benzodioxol-5-ylmethyl)-1-methyl-3-piperidiniumyl)-*N*-{[(4-{[(6-chloro-3-methyl-1-benzothien-2-yl)sulfonyl]oxy}phenyl)amino] carbonyl}-L-tyrosinamide trifluoroacetate;
N-{[(4-{[(2,5-dimethyl-3-thienyl)sulfonyl]oxy}phenyl)amino]carbonyl}-*N*-(*3S*)-1-

15 *N*-(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl)-L-tyrosinamide trifluoroacetate;
N-{(*3S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl}-*N*-{[(4-{[(1-methylethyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;

20 *N*-{(*3S*)-1-[(4-fluorophenyl)methyl]-1-methyl-3-piperidiniumyl}-*N*-{[(4-{[(1-methylethyl)sulfonyl]oxy}phenyl)amino]carbonyl}-L-tyrosinamide trifluoroacetate;
N-{(*3S*)-1-[(3-hydroxyphenyl)methyl]-1-methyl-3-piperidiniumyl}-*N*-{[(4-{[(1-methylethyl) amino]sulfonyl}phenyl)amino]carbonyl}-L-tyrosinamide

25 trifluoroacetate
or any other pharmaceutically acceptable salt, or non-salt form thereof.

6. A Pharmaceutical composition for the treatment of muscarinic acetylcholine receptor mediated diseases comprising a compound according to
30 claim 1 and a pharmaceutically acceptable carrier thereof.

7. A method of inhibiting the binding of acetylcholine to its receptors in a mammal in need thereof comprising administering a safe and effective amount of a compound according to claim 1.

5 8. A method of treating a muscarinic acetylcholine receptor mediated disease, wherein acetylcholine binds to said receptor, comprising administering a safe and effective amount of a compound according to claim 1.

9. A method according to claim 8 wherein the disease is selected from the
10 group consisting of chronic obstructive lung disease, chronic bronchitis, asthma, chronic respiratory obstruction, pulmonary fibrosis, pulmonary emphysema and allergic rhinitis.

10. A method according to claim 9 wherein administration is via inhalation
15 via the mouth or nose.

11. A method according to claim 10 wherein administration is via a medicament dispenser selected from a reservoir dry powder inhaler, a multi-dose dry powder inhaler or a metered dose inhaler.

20 12. A method according to claim 11 wherein the compound is administered to a human and has a duration of action of 12 hours or more for a 1 mg dose.

13. A method according to claim 12 wherein the compound has a duration of
25 action of 24 hours or more.

14. A method according to claim 13 wherein the compound has a duration of action of 36 hours or more.